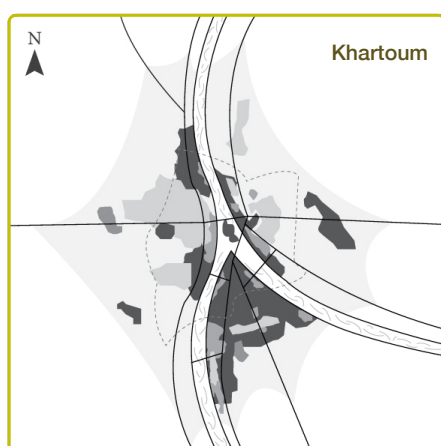


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The Urban Land Nexus and Inclusive Urbanisation in Khartoum

Khartoum Land Nexus Research Team



Summary This Briefing Note is intended for readers interested in understanding how Khartoum, with its complex political and land-related challenges, can move towards more inclusive development, and more accessible and affordable housing in particular. Khartoum vies with Dar es Salaam for being the fifth largest city in Africa. Its extended land nexus keeps expanding and settlements continue to spring up, some of them in plotted and more fully planned locations, and others growing informally. The sprawling city struggles to accommodate all its residents, with their vastly different levels of income. For example, sites and services schemes, the largest formal mechanism for housing provision, have often failed to advance: service providers do not want to invest in sparsely developed neighbourhoods, and neighbourhoods do not thrive without guaranteed service provision. New, more reliable partnerships that are based on realistic expectations are needed, as well as mechanisms to secure better coordination and cooperation, both among residents and with authorities and service providers. Solutions lie in housing schemes that are adjustable to different socioeconomic groups, recognising their different financial capacities and livelihood needs. The new situation created by the December Revolution may provide the momentum to initiate necessary reforms of land governance and management, and a new relation between the government, developers, and residents.

1 City overview and urban expansion

Khartoum, the capital of Sudan, is located at the confluence of the Blue Nile coming from Ethiopia and the White Nile flowing from South Sudan, Uganda, and Tanzania. In 2018, its estimated urban population reached almost eight million inhabitants. Khartoum is marked by a hot dry climate moderated by the river, with temperatures of over 40°C in the summer followed by a short rainy season with high floods and a few months of winter, when night

temperatures can fall below 15°C. The city is between 300 and 600 metres above sea level and is mostly flat, with a few hilly areas around it.

Khartoum consists of three cities around the Niles, connected through ten bridges – Omdurman along the western bank, Khartoum North or Bahri on the eastern bank in the north, and Khartoum between the Niles in the south. All three cities are expanding away from the river;

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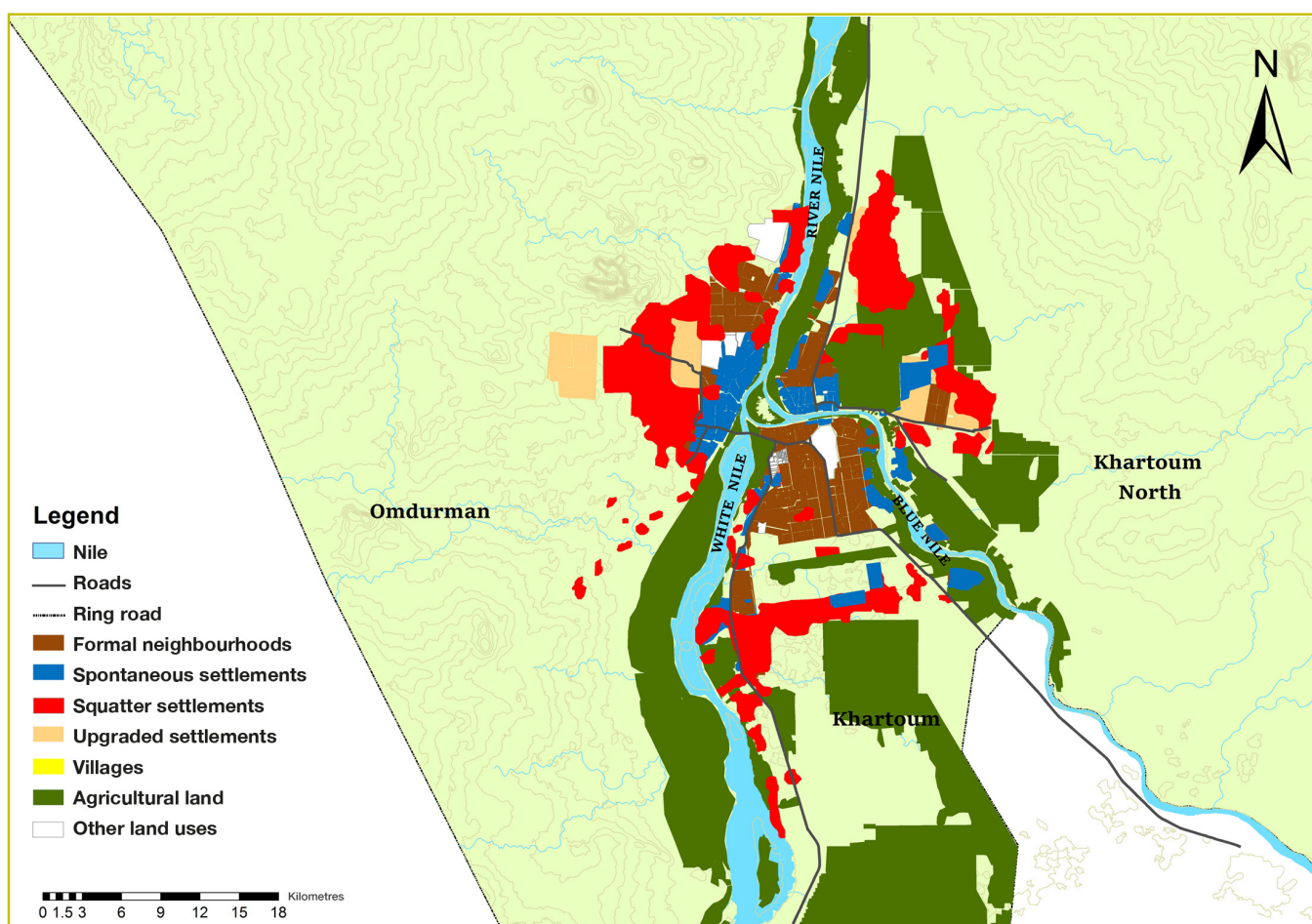
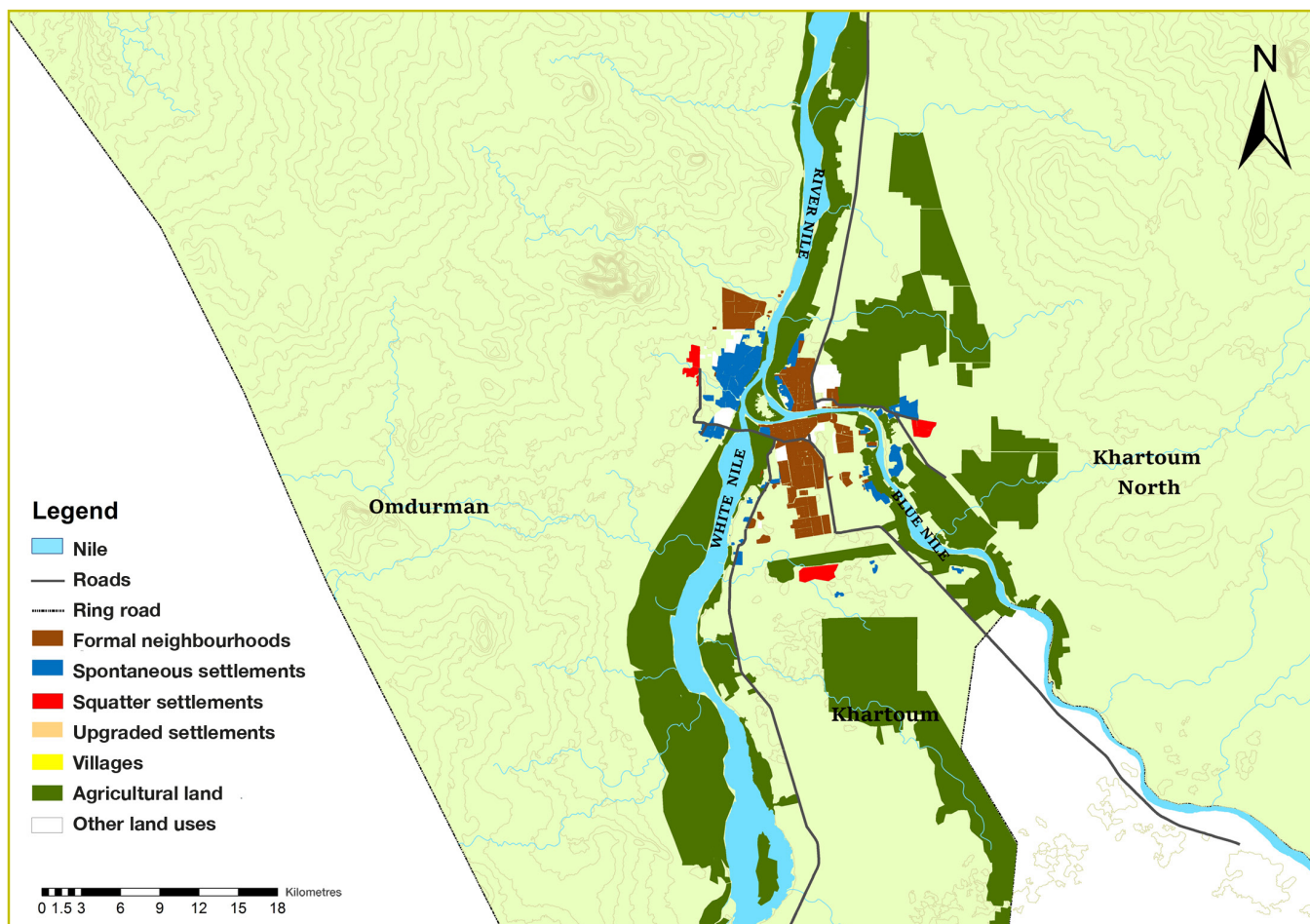


Figure 1 Urban growth and transformation of settlement types in Khartoum from 1975 (top) to 1990 (bottom). Data for the maps were taken from the Ministry of Infrastructure, Khartoum State. Maps developed and coordinated by the University of Khartoum.

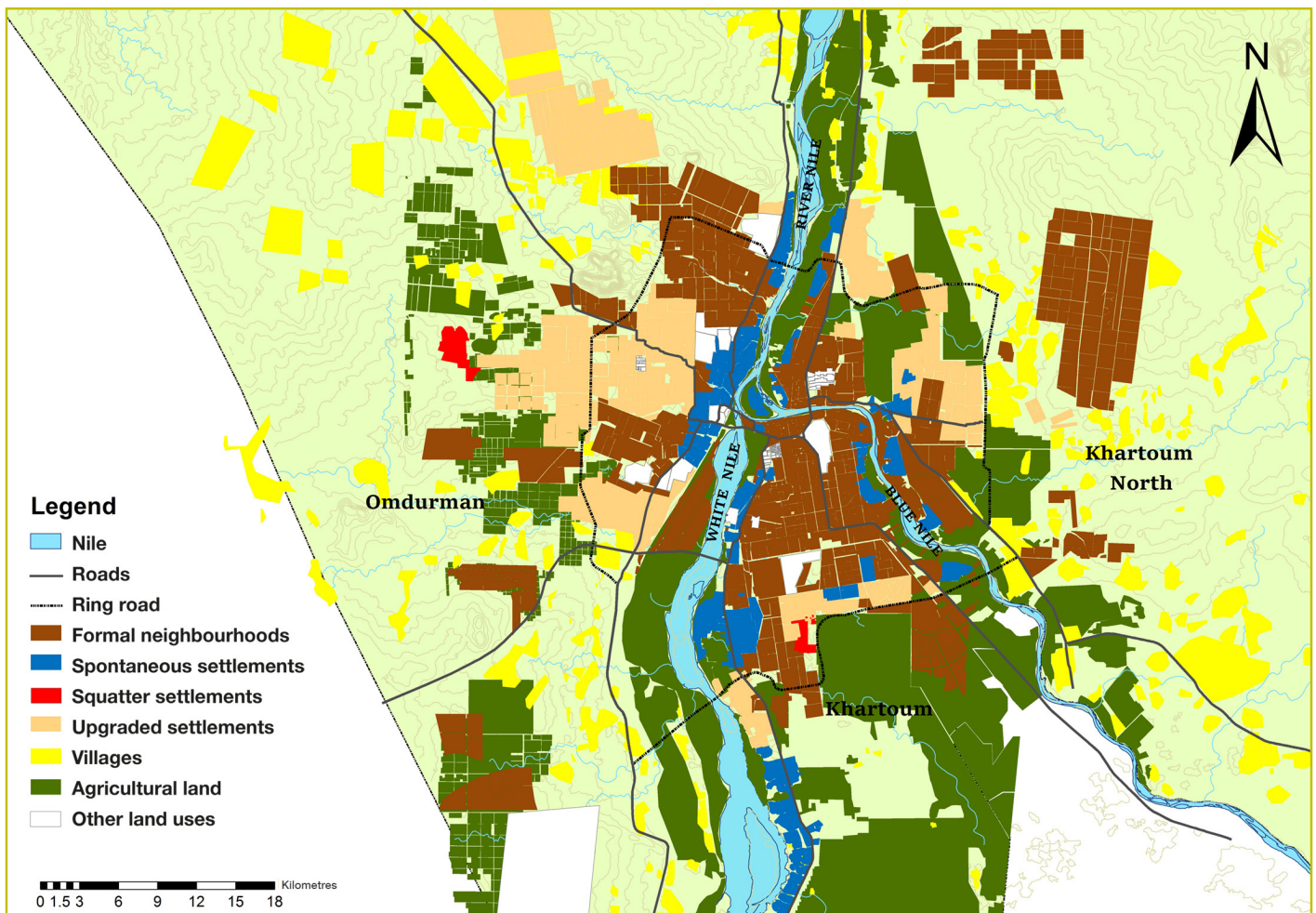


Figure 2 Urban growth and transformation of settlement types in Khartoum from 2017. Data for the maps were taken from the Ministry of Infrastructure, Khartoum State. Maps developed and coordinated by the University of Khartoum.

the urban settlement now stretches more than 40km both in east–west and north–south directions. This extension comes from population growth and migration to Khartoum for economic, environmental, or humanitarian reasons, and also from land grabbing and speculation. In addition, many villages at the urban fringe have been incorporated in the city over recent decades.

For a long time, most residential buildings followed the pattern of privately owned family houses with large courtyards, and living quarters tended to grow almost exclusively in a horizontal direction. However, for a few decades now, high-rise buildings with owner-occupied housing or high-end rental flats have been established in the capital and gained a foothold, especially in districts close to the centres of the three cities. Accordingly, population density in these districts became much higher, while the Central Business Districts (CBDs) experience high day density and low night density. Population numbers are also growing in the outskirts due to continuous migration towards the city, and resettlement and new housing programmes are located farther and farther away from the Nile (e.g. Al-Fateh).

This situation puts a lot of pressure on providing adequate public services and makes it difficult to reach service providers and economic opportunities only available in the centre. Consequently, there is a danger that peripheral areas are cut off from urban development and economic growth, as this leap-frog urban expansion results in very dense residential areas being close to rather empty areas, without a direct link to productive and service areas. This exacerbates fragmentation of the urban space and increased socio-spatial discrepancies between those who have better access to the urban land nexus and those who have difficulties gaining such access.

All over the city, land prices have skyrocketed. With more and more people considering land as an important asset for future economic security, even the state government has capitalised on these increased land values by selling land on the outskirts of the city or by imposing high fees on transforming agricultural land into residential land. There are large areas of land at the outskirts that have become important for speculative investment and processes of land commodification.

Since the 1960s, informal settlements were established by migrants, internally displaced people (IDPs), and refugees from other regions and countries. These were referred to as 'squatter settlements' (see [Figure 1](#) and [Figure 2](#)) and largely considered illegal. Their legal status differentiates them from 'spontaneous settlements' which could also be considered informal in that they do not conform to planning norms. They are generally old settlements or offshoots of agricultural communities that have been absorbed into the urban fabric. In the 1990s, there was a major effort to integrate the 'squatter settlements' into the city by establishing new residential areas at the periphery of the three cities (e.g. Dar Al Salam and Al-Fateh) and relocating people there, and/or upgrading the original settlements. These areas were envisaged to become well integrated into the wider city and benefit from tenure security, better access to services, and improved living conditions. This transition and transformation of settlements and urban form is visible in the chronological maps in [Figure 1](#) and [Figure 2](#).

The research shows that legal titles and variably serviced plots have been gained by those who were relocated, but the peripheral location increased spatial vulnerabilities and the lack of means for construction and services led, partially, to living standards similar to those in the settlements of origin. The manner of implementation also gave room to manipulation, such as intentional 'squatting', to gain compensation or sale of allocated plots. In addition, renting remains the only affordable housing option for many low-income groups and immigrants, apart from squatting and other forms of informal settlement, with very low standards of the building stock and service provision in parts (e.g. in Kalakala Gatiya and Al-Jereif West, two case studies undertaken for this project).

2 Spatial vulnerabilities

Living conditions in Khartoum differ considerably across the city, as do levels of income. The chances to have good livelihoods are unevenly distributed in general, but some groups suffer more from this than others. The majority of the population cannot afford land prices at the private market rate, and so have to access shelter through the formal land and housing allocation mechanisms (e.g. the recently abolished sites and services and state housing schemes), living with family members in extended family constellations, or by renting a house or a room in the private real estate market. For instance, refugees from South Sudan, Ethiopia, and Eritrea, and more recently Syria, Yemen, and Chad, often share the rent of single rooms with many other peers in mixed group tenancy arrangements, and they do not have the right to own land according to the law.

High or unstable rents and deficits of governmental housing schemes push low-income groups to settle informally and thus illegally, which often translates into insecurity of residence and low service provision. Families suffer comparatively more in the peripheries of the city from difficult transport situations, as well as inadequate health and educational services. Some of these informal dwellings can also be found adjacent to or integrated into older and/or high-income neighbourhoods; sometimes very poor people prefer living at the extension of inner old villages or in unfinished buildings in those areas. Many engage in precarious work to gain money.

While there are shortcomings in public service provision all over the city, there is also spatial variability, some of which has to do with the economic status of residents. For example, a sewage system exists only in very limited areas; most households must find individual solutions for sanitation where only affluent groups can afford septic tanks connected to boreholes. Other solutions, such as pit latrines and soakaway pits, are expensive to maintain, not durable, and hazardous during the rainy season, and the drilling of multiple individual pits for wastewater increases the danger of groundwater contamination. In some parts of Omdurman, it is virtually impossible to drill soakaway pits because of geological formations; hence, people must rely on solutions that are even more expensive, such as septic tanks that have to be pumped out frequently. Access to hygienic sanitation thus depends both on location and economic means.

Provision of drinking water is limited by weaknesses and irregularities in the distribution, rather than its general availability. Existing Nile treatment plants and wells produce almost enough for what is needed by the population, but most of these water supply networks need replacement and renewal. In addition, there is a lack of connection to the water supply system, especially in the periphery.

Public service provision can also vary both by area and season. Electricity and water cuts increase during the hottest months (April/May), while the flood season (August/September) can cut off some areas from the transportation system, and houses close to the Nile or other natural watercourses experience flood damage or overflows of sewage almost every year.

3 Promoting more inclusive development in Khartoum's land nexus

Urban land dynamics in Khartoum are very complex and have been highly influenced by the changing mechanisms for land and housing allocation. Many people who were relocated from dire situations gained security of tenure,

but their new residences often lack basic services or are disconnected from the vibrant informal economy in more central areas of the city (e.g. Al-Fateh). The same problem affects land distributed to or purchased by higher-income groups if land development and service distribution delay each other due to the first-mover problem (e.g. Khojalab and Manshya East). The lack of services and the uncertainty of their provision in a foreseeable future also caused a drop in prices, relative to their value in hard currency. Consequently, land in these new residential areas became a speculative asset and a commodity, rather than a place where new urban communities could grow. At the same time, residents in older neighbourhoods of the city were found to flee densification resulting from multiple families living on small plot subdivisions obtained as family inheritance, or congestion of streets and the deteriorating environment that is the result of a large influx of new residents or transit populations (e.g. Al-Shohada).

The broad outlines of these urban land and population dynamics have been known and previously acknowledged and addressed in the latest structural plan for Khartoum. The system and urban land nexus approach adopted in this research brought the insight, however, that several of these dynamics are circular and need solutions to first-mover problems: for instance, if service providers in sites and services scheme areas wait for payments from low-income groups to invest in infrastructure; if these payments cannot be stemmed due to lack of appropriate income opportunities in these areas; and if unserved areas are thus left for new informal settlement.

The research thus leads to the following considerations to improve inclusive development of Khartoum.

3.1 Revitalisation and reform of affordable housing schemes with targeted, stratified governmental support and flexible financing models

The identified weaknesses of previous sites and services schemes suggest a stratified approach that:

- ◆ Provides vulnerable groups (e.g. those with low incomes, weak safety nets, and unstable administrative status) with access to affordable housing (via land title, social housing, and/or rental units with basic public services) through a combination of appropriate refinance schemes (e.g. long-term instalment payment towards rental purchase, microfinance as building loan, and housing cooperatives) with integrated planning (e.g. nearby income opportunities and/or direct transport lines) and prompt implementation to avoid manipulation (e.g. trade with allowances for compensation before resettlement);
- ◆ Provides higher-income groups and developers with incentives to invest in new/upgraded neighbourhoods (e.g. subsidy to capital-intensive service infrastructure rather than land and construction, and stronger involvement of residents/developers in planning and design); and
- ◆ Considers possible spillover effects or complementarity from mixture/juxtaposition of low- and higher-income areas.

3.2 Implementing a stratified approach

The steps to support the implementation of a stratified approach as outlined in Section 3.1 are:

◆ Establish a solid land governance and management system with planning and monitoring bodies on all administrative levels.

The focus should be on strategic and targeted action plans for land use developed with broad-based stakeholder participation and include, among others: (a) the mapping of potential complementarity between residential, industrial, and agricultural areas and regions (e.g. strategic placement/connection of dense, low-income areas with industrial and transport hubs, commercial centres, and service areas); (b) the revaluation of agricultural lands as an asset for urban food security and potential work opportunity for residents (e.g. rural migrants); (c) more equitable, stratified enforcement of measures against illegal land use or lack of plot development (e.g. fees taken for unused lands held as speculative objects by brokers, but not for those held by family households delayed by procedures/lack of means; and (d) removal of illegal settlers remedied by housing reforms that provide alternative low-cost housing opportunities).

- ◆ Develop new and/or upgrade housing in connection to existing and emerging growth centres in the proximity or in other parts of the capital. This must integrate infrastructural, economic, environmental, and social considerations. An example is the case study area Al-Fateh, where further development could be enhanced by: (a) implementing a planned industrial area and its connection to the local workforce; (b) establishing technical schools and vocational training facilities; (c) reducing pollution through a solid waste recycling plant, making use of an existing waste collection site; (d) improving the environment through additional green areas around and inside residential areas; and (e) organising local committees formed by residents to accompany and facilitate implementation.

◆ **Reform the urban land market to provide incentives for use and physical development through a redefined state–developer relationship.**

Based on past experiences documented in the research, state institutions should be promoted as regulating and monitoring bodies rather than investors and brokers in the urban land market. To curb trade with unused land, a combination of commercial and resident-based investment would provide demand-driven and competitive incentives for physical development by higher-income groups, while state oversight can deter from fraudulent or speculative profiteering and intervene in inadequate service provision. Low-income groups without means to enter the competitive land market can be integrated through tailored subsidies and refinance models (e.g. microfinance, pooled funds, and rental purchase), and benefit from spillover effects from developed areas (e.g. infrastructure and employment opportunities). This can be enhanced through the revision of land ownership laws and regulations (e.g. allowing smaller holdings, multi-purpose buildings, and land registration for long-term immigrants).

◆ **Reform the rental market to become an affordable and adequate alternative to squatting or precarious informal settlement by vulnerable groups.** Unless or until other forms of affordable and adequate housing are developed through the aforementioned steps, improvements in this sector are called for to remedy the partially deplorable status of rental units, service provision, and price development. Recommendable measures are the review, ratification and consequent implementation of the rental law (1990, amendment 2015 on hold), including the observation and control of stipulations to prevent unreasonable price increases (e.g. percentage of annual increase, consistence with local market prices, and physical status of rental unit) and to uphold basic standards of rental units (e.g. service provision, building stock, and occupancy rate). To this end, state institutions can be instrumental in the establishment of and/or support to self-organisation in civil society, such as tenants' associations and in the provision of incentives to developers to establish additional rental units.

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The opinions expressed are those of the authors and do not necessarily reflect the views of IDS, EARF, DFID or any of the institutions involved.

Other outputs from the project

Synthesis Report *Examining the Urban Land Nexus and Inclusive Urbanisation in Dar es Salaam, Mwanza, and Khartoum*

Research Report *Investigating the Urban Land Nexus and Inclusive Urbanisation in Dar es Salaam, Mwanza, and Khartoum*

Briefing Note 1 *The Urban Land Nexus and Inclusive Urbanisation in Dar es Salaam, Mwanza, and Khartoum*

Briefing Note 2 *The Urban Land Nexus and Inclusive Urbanisation in Dar es Salaam and Mwanza*

Annexes *The Urban Land Nexus and Inclusive Urbanisation in Dar es Salaam, Mwanza, and Khartoum*

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